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ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			EXAMINER GELAGAY, SHEWAYE	
			ART UNIT	PAPER NUMBER
			2133	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,271

Applicant(s)

TAYLOR ET AL.

Examiner

Shewaye Gelagay

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/12/01</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-26 have been examined.

Specification

2. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a

Art Unit: 2133

nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 and 6 recite the limitation "the number of data player device" in line 1.

There is insufficient antecedent basis for this limitation in the claim.

7. Claim 1 recites the limitation "a second data storage means" in lines 7 and 25. It is unclear whether the "a second data storage means" in line 25 is the same as that defined in line 7. It is therefore, being considered as the same "second data storage means" to avoid ambiguity.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-4 and 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Downs et al. United States Letter Patent Number 6,226,618 in view of Yoshida et al. United States Letter Patent Number 6,075,862.

As per claim 1:

Downs et al. teach a method for controlling the number of data player devices (2) which may be used for payback of data which has been copied, using a copying system (1), from a first data storage means (22) accessible to the copying system in use thereof, to a second data storage means (3) associated with the player device(s), the method comprising the steps of:

providing a copy management means to which data copied from the first data storage means is delivered from the copying system (1); (Col. 7, 16-17; secure containers are used to distribute encrypted content and information among the system components)

Art Unit: 2133

providing a registration code (37) for each of a plurality of data player devices (2) said registration codes all being different. (Col. 7, lines 61-64; a second watermark is embedded in the content at the end-user device to identify...end-user device ()

providing a private key (42) for each of said data player devices, said private keys all being different; (Col. 6, item 417; recipient decrypts the encrypted symmetric key using the recipient's private key)

storing a predetermined maximum number of said registration codes in memory means (28) of the copy management means; (Col. 7; lines 41-45; the control of content usage is enabled through the end-user player application running on end-user device. The application embeds a digital code in every copy of the content that defines the allowable number of secondary copies and playbacks)

using an encryption key provided in the copy management means to encrypt data delivered to the copy management means from the copying system, and using each stored registration code to encrypt a decryption key provided in the copy management means, so as to provide a plurality of respective encrypted decryption keys. (Col. 3, lines 43-45; the data is encrypted so as to only be decryptable by a data decrypting key, the data decrypting key being encrypted using a first public key)

transferring the encrypted data to a second data storage means (3) associated with at least one said player device, together with the plurality of encrypted decryption keys; (Col. 6, lines 43-44; these devices may copy the content to external media or portable, consumer devices)

using the private key provided in said at least one player device to decrypt the receptive encrypted decryption key, and using the decrypted decryption key to decrypt the encrypted data transferred to said second data storage means; and (Col. 6, item 417 and 418; recipient decrypts the encrypted symmetric key using the recipient's private key, recipient uses the symmetric key to decrypt the encrypted content. This recovers the content)

preventing new registration codes from being stored in the memory means (28) of the copy management means until a predetermined time period has elapsed. (Col. 7, lines 5-8; control and enforcement of content usage according to the conditions of purchase or license, such as permitted number of copies, number of plays, and the time interval or term the license may be valid.)

Not explicitly disclosed by Downs et al. is using each registered code to encrypt decryption key provided in the copy management means, so as to provide a plurality of respective encrypted decryption key.

Yoshida et al. in analogous art, however, disclose using each registered code to encrypt decryption key provided in the copy management means, so as to provide a plurality of respective encrypted decryption key. (Col. 11, lines 5-6; encryption of the decryption key by using the machine ID)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Downs et al. to include using each registered code to encrypt decryption key provided in the copy management means, so as to provide a plurality of respective encrypted decryption key.

Art Unit: 2133

This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Yoshida et al. (Col. 7, lines 51-53) in order to manage digital content usage and collect the necessary charge automatically by utilizing the request and the issuance of the decryption key. This way, the system is used for tracking usage of digital content on each user devices.

As per claim 2:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition Downs et al, further disclose a method wherein the decryption key provided in said copy management means is also the encryption key used to encrypt the data being copied. (Col. 15, process flow for encryption process of Fig. 3 item 301 and item 303; and Col. 16, process flow for decryption process of Fig. 4 item 417 and item 418)

As per claim 3:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition Downs et al, further disclose a method wherein the decryption key stored in the copy management means is different to the encryption key. (Col. 15, process flow for encryption process of Fig. 3 item 301 and item 303; and Col. 16, process flow for decryption process of Fig. 4 item 417 and item 418; the decryption key stored in the copy management is encrypted using the recipient's public key)

As per claim 4:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition Downs et al, further disclose a method wherein the private key (42) provided

Art Unit: 2133

in each player device is different to the registration code (37) for the player device. (Col. 6, item 417 and 418; symmetric key and private key)

As per claim 6:

Downs et al. teach a copy management apparatus for controlling the number of data player devices (2) which may be used for playback of data which has been copied, using a copying system (1), from a first data storage means (22) accessible to the copying system in use thereof, to a second data storage means (3) associated with player device (s), the apparatus comprising:

memory means (28) for storing up to a predetermined maximum number of registration codes (37), each said code being associated with a respective data player device (2); (Col. 7; lines 41-45; the control of content usage is enabled through the end-user player application running on end-user device. The application embeds a digital code in every copy of the content that defines the allowable number of secondary copies and playbacks)

encryption means (26, 78) for encrypting data delivered thereto, including an encryption key, provided in the apparatus, using each said registration code which is stored in the memory means (28) in order to generate a respective encrypted decryption key for each said stored registration code; (Col. 3, lines 43-45; the data is encrypted so as to only be decryptable by a data decrypting key, the data decrypting key being encrypted using a first public key)

clock means (30, 33) for measuring the passing of finite predetermined period of time within which new registration codes (37) are prevented from being stored in the

Art Unit: 2133

memory means (28); (Col. 7, lines 5-8; control and enforcement of content usage according to the conditions of purchase or license, such as permitted number of copies, number of plays, and the time interval or term the license may be valid.)

monitoring means (27, 35) for monitoring the number of registration codes stored in the memory mean and starting said clock means when said monitoring means detects that the predetermined maximum number of codes have been stored; (Col. 7, lines 5-8; control and enforcement of content usage according to ... number of plays, and the time interval or term the license may be valid and Col. 10, lines 15-18; the secondary usage conditions data can include ... target device types, or timed-availability restrictions)

protection means (34, 72) for setting the memory means in a protected mode, in which new registration codes are prevented from being entered in the memory, while said clock means (30, 33) measures the passing of said finite period of time; (Col. 7, lines 5-8; control and enforcement of content usage according to the conditions of purchase or license, such as permitted number of copies, number of plays, and the time interval or term the license may be valid.)

registration handler means (27) for receiving at least one registration code uploaded, directly or indirectly, from at least one said data player device (2), comparing said at least one uploaded registration code with the registration codes already stored in the memory means, storing said at least one uploaded registration code in the memory means (28) if the memory means does not already contain said at least one uploaded registration code and the memory means does not already contain said predetermined

Art Unit: 2133

maximum number of registration codes, and preventing said uploaded registration code from being stored in the memory means if the memory means is set in said protected mode; (Col. 7, lines 61-64; a second watermark is embedded in the content at the end-user device to identify...end-user device) and

data transfer means (24, 80) for transferring the encrypted data, together with each said encrypted decryption key, to a second data storage means (3) associated with at least one said player device. (Col. 6, lines 43-44; these devices may copy the content to external media or portable, consumer devices)

Not explicitly disclosed by Downs et al. is to generate a respective encrypted decryption key for each said stored registration code.

Yoshida et al. in analogous art, however, disclose generating a respective encrypted decryption key for each said stored registration code. (Col. 11, lines 5-6; encryption of the decryption key by using the machine ID)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Downs et al. to include generating a respective encrypted decryption key for each said stored registration code. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Yoshida et al. (Col. 7, lines 51-53) in order to manage digital content usage and collect the necessary charge automatically by utilizing the request and the issuance of the decryption key. This way, the system is used for tracking usage of digital content on each user devices.

Art Unit: 2133

As per claim 7:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose wherein the monitoring means comprises counter means (35), for counting the number of registration codes (37), which are written to the memory means. (Col. 7; lines 41-45; the control of content usage is enabled through the end-user player application running on end-user device. The application embeds a digital code in every copy of the content that defines the allowable number of secondary copies and playbacks)

As per claim 8:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose wherein the registration handler means (27) is formed and arranged to check the status of the counter means (35), upon receiving an uploaded registration code, and to allow or prevent the uploaded registration code from being written in the memory means (28) according to whether the counter means indicates that the memory means already contains said predetermined maximum number of stored registration codes or not, respectively. (Col. 7, lines 44-45 and Col. 10, lines 15-18)

As per claim 9:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose wherein the encryption key is selected from a predetermined list of encryption keys stored in a memory means of the copy

Art Unit: 2133

management apparatus. (Col. 42, lines 33-34; the key_public_key_identifier indicates the encryption key that was used to encrypt the symmetric key)

As per claim 10:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose wherein the encryption means includes encryption key generating means (29) for generating at least one encryption key. (Col. 52, line 49; the encryption keys generated by the encryption stage)

As per claim 11:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose wherein the decryption key is also the encryption key. (Col. 15, process flow for encryption process of Fig. 3 item 301 and item 303; and Col. 16, process flow for decryption process of Fig. 4 item 417 and item 418)

As per claim 12:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose wherein the decryption key is selected from a predetermined list of decryption keys stored in a memory means of the copy management apparatus. (Col. 7, lines 32-34; ...releases decryption keys only for authorized and appropriate usage requests)

As per claim 13:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose wherein the encryption means (29) includes decryption key generating means for generating at least one encryption at least one

Art Unit: 2133

decryption key. (Col. 15, process flow for encryption process of Fig. 3 item 301 and item 303; and Col. 16, process flow for decryption process of Fig. 4 item 417 and item 418)

10. Claims 14-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Downs et al. United States Letter Patent Number 6,226,618 in view of Yoshida et al. United States Letter Patent Number 6,075,862 and further in view of Wonfor et al. United States Letter Patent Number 6,381,747.

As per claim 14:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. Both references do not explicitly teach an apparatus wherein the apparatus is implemented in an Application Specific Integrated Circuit (ASIC).

Wonfer et al. in analogous art, however, disclose an apparatus is implemented in an Application Specific Integrated Circuit (ASIC). (Col. 6, lines 56-57)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Downs et al. and Yoshida et al. to include wherein the apparatus is implemented in an Application Specific Integrated Circuit (ASIC). This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Wonfer et al. (Col. 2, lines 39-40) in order to place appropriate control and tracking systems for digital copy protection.

As per claim 15:

Art Unit: 2133

Downs et al., Yoshida et al. and Wonfer et al. teach all the subject matter as discussed above. In addition, Wonfer et al. disclose an apparatus wherein the ASIC is incorporated in the copying system (1). (Col. 6, lines 57-58)

As per claim 16:

Downs et al., Yoshida et al. and Wonfer et al. teach all the subject matter as discussed above. In addition, Wonfer et al. disclose an apparatus wherein the apparatus is provided as external hardware for connection between the copying system (1) and the second data storage means (3). (Figure 2, item 20; Col. 5, lines 39-41)

As per claim 17:

Downs et al., Yoshida et al. and Wonfer et al. teach all the subject matter as discussed above. In addition, Wonfer et al. disclose an apparatus wherein the encryption means (26), including the encryption key, are held in an internal non-volatile memory means provided in the ASIC, which internal non-volatile memory means is inaccessible to a user. (Col. 8, lines 60-61)

As per claim 18:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition, Wonfer et al. disclose an apparatus wherein the clock means (30, 33), monitoring means (27, 35), the protection means (34, 72) and the memory means (28) for storing said registration codes are all inaccessible to a user. (Col. 7, lines 9-13 and Col. 8; lines 12-16)

As per claim 19:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. In addition, Wonfer et al. disclose an apparatus wherein the encryption means (26, 78), monitoring means (27, 35) and registration handler means (27) are implemented by processor means controlled by programming code held in a memory means of the copying system (1). (Col. 6, lines 7-15)

As per claim 20:

Downs et al. teach a data copying and playback system incorporating copy management, the system comprising:

copying means (1) for copying digital data from a first data storage means (22) accessible to the copying means in use thereof to at least one second data storage means (3) provided as part of the copying and playback system; (Col. 7, 16-17; secure containers are used to distribute encrypted content and information among the system components)

at least one data player device (2) for playing back data stored on an associated said second data storage means (2), each said player device having a respective registration code and a respective private key (42) stored in a first memory (98) provided in the player device; (Col. 6, lines 42-43; the end user device include PCS, set top boxes (IRDs), and Internet appliances, Col. 7, lines 31-34 and lines 61-64)

second memory means (28) associated with the copying means for storing up to a predetermined maximum number of said registration codes, each code being associated with a respective said player device; (Col. 7; lines 41-45; the control of content usage is enabled through the end-user player application running on end-user

Art Unit: 2133

device. The application embeds a digital code in every copy of the content that defines the allowable number of secondary copies and playbacks)

encryption means (26, 78) for encrypting data copied from the first data storage means, including an encryption key for use in carrying out the data encryption, and including encryption means for encrypting a decryption key provided in the copying means using each said registration code which is stored in the second memory means, in order to generate a respective encrypted decryption key for each said stored registration code; (Col. 3, lines 43-45; the data is encrypted so as to only be decryptable by a data decrypting key, the data decrypting key being encrypted using a first public key)

clock means (30, 33) for measuring the passing of finite predetermined period of time within which new registration codes are prevented from being stored in the memory means; (Col. 7, lines 5-8; control and enforcement of content usage according to the conditions of purchase or license, such as permitted number of copies, number of plays, and the time interval or term the license may be valid.)

monitoring means (27, 35) for monitoring the number of registration codes stored in the second memory means (28) and starting said clock means when said monitoring means detects that the predetermined maximum number of codes have been stored; (Col. 7, lines 5-8; control and enforcement of content usage according to ... number of plays, and the time interval or term the license may be valid and Col. 10, lines 15-18; the secondary usage conditions data can include ... target device types, or timed-availability restrictions)

protection means (34, 72) for setting the memory means in a protected mode, in which new registration codes are prevented from being stored therein, while said clock means measures the passing of said finite period of time; (Col. 7, lines 5-8; control and enforcement of content usage according to the conditions of purchase or license, such as permitted number of copies, number of plays, and the time interval or term the license may be valid.)

registration handler means (27) for receiving at least one said registration code uploaded, directly or indirectly, from at least one said data player device, comparing said at least one uploaded registration code with the registration codes already stored in the second memory means, storing said at least one uploaded registration code in the memory means if the second memory means does not already contain said at least one uploaded registration code and the memory means does not already contain said predetermined maximum number of registration codes, and preventing said uploaded registration code from being stored in the memory means if the second memory means is set in said protected mode; (Col. 7, lines 61-64; a second watermark is embedded in the content at the end-user device to identify...end-user device) and

data transfer means (24, 80) for transferring the encrypted data to at least one said second data storage means (3), together with each said encrypted decryption key; (Col. 6, lines 43-44; these devices may copy the content to external media or portable, consumer devices)

decryption means (36, 94) provided in each said player device (2) for decryption the encrypted data transferred to said second data storage means, and including

Art Unit: 2133

decryption means (94) for decrypting the a said encrypted decryption key corresponding to the said player device, using the respective private key (42) for the said player device; (Col. 6, item 417 and 418; recipient decrypts the encrypted symmetric key using the recipient's private key, recipient uses the symmetric key to decrypt the encrypted content. This recovers the content); and

playback means (96, 40) for playing the decrypted analogue data signal to a user. (Col. 79, lines 12-15; the applications in the end-user device for the secure digital content electronic distribution system perform ... playback of encrypted content)

Not explicitly disclosed by Downs et al. is encrypting a decryption key provided in the copying means using each said registration code which is stored in the second memory means, in order to generate a respective encrypted decryption key for each said stored registration code.

Yoshida et al. in analogous art, however, disclose encrypting a decryption key provided in the copying means using each said registration code which is stored in the second memory means, in order to generate a respective encrypted decryption key for each said stored registration code. (Col. 11, lines 5-6; encryption of the decryption key by using the machine ID)

The rationale for combining the two references is the same as claim 1.

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. Both references do not explicitly disclosed digital to analogue converter means (38) for converting the decrypted digital data into an analogue data signal for a user to playback.

Wonfor et al. in analogous art, however, disclose digital to analogue converter means (38) for converting the decrypted digital data into an analogue data signal for a user to playback. (Col. 2, lines 54-58)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Downs et al. to include digital to analogue converter means (38) for converting the decrypted digital data into an analogue data signal for a user to playback. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so in order to play audio or music that is downloaded or transferred as digital data.

As per claim 21:

Downs et al., Yoshida et al. and Wonfer et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose a system wherein the digital data copied from the first data storage means (22) is digital audio data and the decrypted analogue data signal is an audio signal. (Col. 6, lines 45-48)

As per claim 22:

Downs et al., Yoshida et al. and Wonfer et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose a system wherein the second data storage means comprises a removable solid state memory card (3) formed and arranged for interfacing with the player device (2) and with the copying means (1). (Col. 6, lines 43-44; these devices may copy the content to external media or portable, consumer devices)

Art Unit: 2133

As per claim 23:

Downs et al., Yoshida et al. and Wonfer et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose a system wherein the second data storage means comprises solid state memory means incorporated in the player device, and the player device is formed and arranged for interfacing to the copying system to enable the registration code stored in the first memory means (98) in the player device to be uploaded therefrom to the registration handler means (27). (Col. 6, lines 43-44; these devices may copy the content to external media or portable, consumer devices)

As per claim 24:

Downs et al., Yoshida et al. and Wonfer et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose a system wherein the first memory means is provided in the second data storage means in the player device. (Col. 19, item 146)

As per claim 25:

Downs et al., Yoshida et al. and Wonfer et al. all the subject matter as discussed above. In addition, Wonfer et al. further disclose a system wherein the decryption means (36, 94) and the D/A converter means (38) are provided in an ASIC incorporated in the player device (2). (Col. 5, lines 9-13)

As per claim 26:

Downs et al., Yoshida et al. and Wonfer et al. teach all the subject matter as discussed above. In addition, Downs et al. further disclose a system wherein each data

Art Unit: 2133

player device (2) whose registration code (37) is stored in said second memory means (28) is provided with identifier means for identifying the said corresponding encrypted decryption key for the said data player device from all of the encrypted decryption keys transferred to the second data storage means (3). (Col. 7, lines 61-64; a second watermark is embedded in the content at the end-user device to identify...end-user device)

11. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Downs et al. United States Letter Patent Number 6,226,618 in view of Yoshida et al. United States Letter Patent Number 6,075,862 and further in view of Grundy United States Letter Patent Number 5,375,240.

As per claim 5:

Downs et al. and Yoshida et al. teach all the subject matter as discussed above. Both references do not explicitly teach a method wherein the private key (42) provided in each player device is the registration code (37) for the player device.

Grundy in analogous art, however, disclose a method wherein the private key (42) provided in each player device is the registration code (37) for the player device. (Col. 15, lines 5-10; using the software specific encryption/decryption key code as retrieved, the registration code is decrypted and then unpacked into its component fields)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Downs et al. and Yoshida et al. to include wherein the apparatus is implemented in an Application

Art Unit: 2133

Specific Integrated Circuit (ASIC). This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by Grundy et al. (Col. 15, lines 9-11) in order to include a user data ... a hardware identification code in one field.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shewaye Gelagay whose telephone number is 571-272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/10/04

Shewaye Gelagay
Examiner
Art Unit 2133


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